

1 This listing of claims will replace all prior versions, and listings, of claims
2 in the application.

3
4 **Listing of Claims:**

5
6 Claim 1 (Currently amended): A method for tracking a requested signal,
7 the method comprising:

8 receiving at a server computer, a request for the requested signal;

9 generating at the server computer, transaction identification data which
10 identifies the received request;

11 including at the server computer, a pattern in the requested signal to form a
12 watermarked signal using a predetermined basis signal, wherein the transaction
13 identification data can be derived from the pattern; further wherein the inclusion of
14 the basis signal in the requested signal is designed to introduce no more than a
15 predetermined maximum level of perceptibility to the requested signal.

16
17 Claim 2 (Original): The method of Claim 1 where including comprises:

18 retrieving the basis signal; and

19 including the basis signal in the requested signal to form the watermarked
20 signal in such a manner that the pattern is embedded in the watermarked signal and
21 can be recognized in the watermarked signal.

1 Claim 3 (Previously presented): The method of Claim 2 wherein including
2 the basis signal comprises:
3 logically dividing the basis signal into segments; and
4 for each segment of the basis signal,
5 adding the segment of the basis signal to a corresponding segment of the
6 requested signal upon a condition in which a corresponding portion of the pattern
7 has a first logical value; and
8 subtracting the segment of the basis signal from the corresponding segment
9 of the requested signal upon a condition in which the corresponding portion of the
10 pattern has a second logical value.

11
12 Claim 4 (Currently amended): The method of Claim 1 further comprising:
13 sending from the server computer, watermarked signal in response to the
14 request for the requested signal.

15
16 Claim 5 (Original): The method of Claim 1 wherein including comprises:
17 selecting watermarked signal fragments representing a first logical value for
18 corresponding portions of the pattern which have the first logical value;
19 selecting watermarked signal fragments representing a second logical value
20 for corresponding portions of the pattern which have the second logical value; and
21 combining the watermarked signal fragments representing the first and
22 second logical values to form the watermarked signal.

1 Claim 6 (Previously presented): The method of Claim 5 wherein the
2 watermarked signal fragments are compressed such that the watermarked signal
3 fragments comprise the watermarked signal in a compressed form.

4
5 Claim 7 (Currently amended): A method for enabling embedding of
6 transaction-specific identification data into a requested signal, the method
7 comprising:

8 logically dividing the requested signal into segments at a server computer;

9 for each segment,

10 embedding a first logical value in the segment to form a first
11 embedded segment;

12 embedding a second logical value in the segment to form a second
13 embedded segment; and

14 including both the first and second embedded segments in a
15 composite signal.

16
17 Claim 8 (Original): The method of Claim 7 further comprising:

18 for each of the segments of the requested signal:

19 selecting from first and second embedded segments of the composite signal
20 according to a corresponding bit of the transaction-specific identification data.

1 Claim 9 (Original): The method of Claim 8 further comprising:
2 combining the selected embedded segments of the composite signal to form
3 a watermarked signal which includes the transaction-specific identification data
4 embedded therein.

5
6 Claim 10 (Original): The method of Claim 7 wherein including both the
7 first and second embedded segments in a composite signal comprises:
8 including the first embedded segment in a first frame;
9 compressing the first frame to form a first compressed frame;
10 including the second embedded segment in a second frame;
11 compressing the second frame to form a second compressed frame; and
12 including both the first and second compressed frames in the composite
13 signal.

14
15 Claim 11 (Original): The method of Claim 10 wherein including both the
16 first and second embedded segments in a composite signal further comprises:
17 determining that the first and second compressed frames are equivalent; and
18 including a single compressed frame in the composite signal to represent
19 both the first and second compressed frames.

20
21 Claim 12 (Currently amended): A method for embedding transaction-
22 specific identification data into a requested signal, the method comprising:
23 retrieving at a server computer, a composite signal which includes, for each
24 of one or more corresponding portions of the requested signal, a first marked
25 segment which represents a first logical value embedded in the corresponding

1 portion of the requested signal and a second marked segment which represents a
2 second logical value embedded in the corresponding portion of the requested
3 signal;

4 for each of the corresponding portions of the requested signal, selecting
5 segments of the composite signal according to logical values of corresponding bits
6 of the transaction-specific identification data; and

7 combining at the server computer the selected segments to form a
8 watermarked signal which includes the transaction-specific identification data
9 embedded therein.

10
11 Claim 13 (Original): The method of Claim 12 wherein the first and second
12 marked segments are compressed such that watermarked signal formed by
13 combining the selected segments is compressed.

14
15 Claim 14 (Currently amended): A computer-readable storage medium on
16 which is stored computer code which, when executed by a server-side computer,
17 causes the computer to enable tracking a requested signal by:

18 receiving a request for the requested signal;

19 generating transaction identification data which identifies the received
20 request;

21 including a pattern in the requested signal to form a watermarked signal
22 using a predetermined basis signal, wherein the transaction identification data can
23 be derived from the pattern; further wherein the inclusion of the basis signal in the
24 requested signal is designed to introduce no more than a predetermined maximum
25 level of perceptibility to the requested signal.

1
2 Claim 15 (Original): The computer-readable storage medium of Claim 14
3 where including comprises:

4 retrieving the basis signal; and

5 including the basis signal in the requested signal to form the watermarked
6 signal in such a manner that the pattern is embedded in the watermarked signal and
7 can be recognized in the watermarked signal.

8
9 Claim 16 (Previously presented): The computer-readable storage medium
10 of Claim 15 wherein including the basis signal comprises:

11 logically dividing the basis signal into segments; and

12 for each segment of the basis signal,

13 adding the segment of the basis signal to a corresponding segment of
14 the requested signal upon a condition in which a corresponding portion of
15 the pattern has a first logical value; and

16 subtracting the segment of the basis signal from the corresponding
17 segment of the requested signal upon a condition in which the
18 corresponding portion of the pattern has a second logical value.

19
20 Claim 17 (Original): The computer-readable storage medium of Claim 14
21 wherein the computer code, when executed by the computer, further causes the
22 computer to enable tracking a requested signal by:

23 sending the watermarked signal in response to the request for the requested
24 signal.

1 Claim 18 (Original): The computer-readable storage medium of Claim 14
2 wherein including comprises:

3 selecting watermarked signal fragments representing a first logical value for
4 corresponding portions of the pattern which have the first logical value;

5 selecting watermarked signal fragments representing a second logical value
6 for corresponding portions of the pattern which have the second logical value; and

7 combining the watermarked signal fragments representing the first and
8 second logical values to form the watermarked signal.

9
10 Claim 19 (Original): The computer-readable storage medium of Claim 18
11 wherein the watermarked signal fragments are compressed such that combining the
12 watermarked signals fragments forms the watermarked signal in a compressed
13 form.

14
15 Claim 20 (Currently amended): A computer-readable storage medium on
16 which is stored computer code which, when executed by a server-side computer,
17 causes the computer to enable embedding of transaction-specific identification
18 data into a requested signal by:

19 logically dividing the requested signal into segments;

20 for each segment,

21 embedding a first logical value in the segment to form a first
22 embedded segment;

23 embedding a second logical value in the segment to form a second
24 embedded segment; and
25

1 including both the first and second embedded segments in a
2 composite signal.

3
4 Claim 21 (Original): The computer-readable storage medium of Claim 20
5 wherein the computer code, when executed by the computer, further causes the
6 computer to enable embedding of transaction-specific identification data into a
7 requested signal by:

8 for each of the segments of the requested signal:

9 selecting from first and second embedded segments of the composite
10 signal according to a corresponding bit of the transaction-specific
11 identification data.

12
13 Claim 22 (Original): The computer-readable storage medium of Claim 21
14 wherein the computer code, when executed by the computer, further causes the
15 computer to enable embedding of transaction-specific identification data into a
16 requested signal by:

17 combining the selected embedded segments of the composite signal to form
18 a watermarked signal which includes the transaction-specific identification data
19 embedded therein.

20
21 Claim 23 (Original): The computer-readable storage medium of Claim 20
22 wherein including both the first and second embedded segments in a composite
23 signal comprises:

24 including the first embedded segment in a first frame;

25 compressing the first frame to form a first compressed frame;

1 including the second embedded segment in a second frame;
2 compressing the second frame to form a second compressed frame; and
3 including both the first and second compressed frames in the composite
4 signal.

5
6 Claim 24 (Original): The computer-readable storage medium of Claim 23
7 wherein including both the first and second embedded segments in a composite
8 signal further comprises:

9 determining that the first and second compressed frames are equivalent; and
10 including a single compressed frame in the composite signal to represent
11 both the first and second compressed frames.

12
13 Claim 25 (Currently amended): A computer-readable storage medium on
14 which is stored computer code which, when executed by a server-side computer,
15 causes the computer to enable embedding transaction-specific identification data
16 into a requested signal by:

17 retrieving a composite signal which includes, for each of one or more
18 corresponding portions of the requested signal, a first marked segment which
19 represents a first logical value embedded in the corresponding portion of the
20 requested signal and a second marked segment which represents a second logical
21 value embedded in the corresponding portion of the requested signal;

22 for each of the corresponding portions of the requested signal, selecting
23 segments of the composite signal according to logical values of corresponding bits
24 of the transaction-specific identification data; and
25

1 combining the selected segments to form a watermarked signal which
2 includes the transaction-specific identification data embedded therein.

3
4 Claim 26 (Original): The computer-readable storage medium of Claim 25
5 wherein the first and second marked segments are compressed such that
6 watermarked signal formed by combining the selected segments is compressed.

7
8 Claim 27 (Currently amended): A server computer system comprising:
9 a processor;
10 a memory coupled to the processor; and
11 a watermarker which executes in the processor from the memory and which,
12 when executed, enables tracking of a requested signal by:

13 receiving a request for the requested signal;
14 generating transaction identification data which identifies the
15 received request; and

16 including a pattern in the requested signal to form a watermarked
17 signal using a predetermined basis signal, wherein the transaction
18 identification data can be derived from the pattern; further wherein the
19 inclusion of the basis signal in the requested signal is designed to introduce
20 no more than a predetermined maximum level of perceptibility to the
21 requested signal.

22
23 Claim 28 (Original): The computer system of Claim 27 where including
24 comprises:

25 retrieving the basis signal; and

1 including the basis signal in the requested signal to form the watermarked
2 signal in such a manner that the pattern is embedded in the watermarked signal and
3 can be recognized in the watermarked signal.
4

5 Claim 29 (Previously presented): The computer system of Claim 28
6 wherein including the basis signal comprises:

7 logically dividing the basis signal into segments; and

8 for each segment of the basis signal,

9 adding the segment of the basis signal to a corresponding segment of
10 the requested signal upon a condition in which a corresponding portion of
11 the pattern has a first logical value; and

12 subtracting the segment of the basis signal from the corresponding
13 segment of the requested signal upon a condition in which the
14 corresponding portion of the pattern has a second logical value.
15

16 Claim 30 (Original): The computer system of Claim 27 wherein the
17 watermark, when executed, enables tracking of a requested signal by also:

18 sending the watermarked signal in response to the request for the requested
19 signal.
20

21 Claim 31 (Original): The computer system of Claim 27 wherein including
22 comprises:

23 selecting watermarked signal fragments representing a first logical value for
24 corresponding portions of the pattern which have the first logical value;
25

1 selecting watermarked signal fragments representing a second logical value
2 for corresponding portions of the pattern which have the second logical value; and
3 combining the watermarked signal fragments representing the first and
4 second logical values to form the watermarked signal.

5
6 Claim 32 (Original): The computer system of Claim 31 wherein the
7 watermarked signal fragments are compressed such that combining the
8 watermarked signals fragments forms the watermarked signal in a compressed
9 form.

10
11 Claim 33 (Currently amended): A server computer system comprising:
12 a processor;
13 a memory coupled to the processor; and
14 a blank watermark which executes in the processor from the memory and
15 which, when executed, enables embedding of transaction-specific identification
16 data into a requested signal by:

17 logically dividing the requested signal into segments;
18 for each segment,
19 embedding a first logical value in the segment to form a first
20 embedded segment;
21 embedding a second logical value in the segment to form a
22 second embedded segment; and
23 including both the first and second embedded segments in a
24 composite signal.

1 Claim 34 (Original): The computer system of Claim 33 further comprising:
2 for each of the segments of the requested signal:

3 selecting from first and second embedded segments of the
4 composite signal according to a corresponding bit of the transaction-
5 specific identification data.
6

7 Claim 35 (Original): The computer system of Claim 34 wherein the blank
8 watermark, when executed, enables embedding of transaction-specific
9 identification data into a requested signal by also:

10 combining the selected embedded segments of the composite signal to form
11 a watermarked signal which includes the transaction-specific identification data
12 embedded therein.
13

14 Claim 36 (Original): The computer system of Claim 33 wherein including
15 both the first and second embedded segments in a composite signal comprises:

16 including the first embedded segment in a first frame;

17 compressing the first frame to form a first compressed frame;

18 including the second embedded segment in a second frame;

19 compressing the second frame to form a second compressed frame; and

20 including both the first and second compressed frames in the composite
21 signal.
22

23 Claim 37 (Original): The computer system of Claim 36 wherein including
24 both the first and second embedded segments in a composite signal further
25 comprises:

1 determining that the first and second compressed frames are equivalent; and
2 including a single compressed frame in the composite signal to represent
3 both the first and second compressed frames.

4
5 Claim 38 (Currently amended): A server computer system comprising:
6 a processor;
7 a memory coupled to the processor; and
8 a watermark which executes in the processor from the memory and which,
9 when executed, embeds transaction-specific identification data into a requested
10 signal by:

11 retrieving a composite signal which includes, for each of one or more
12 corresponding portions of the requested signal, a first marked segment
13 which represents a first logical value embedded in the corresponding
14 portion of the requested signal and a second marked segment which
15 represents a second logical value embedded in the corresponding portion of
16 the requested signal;

17 for each of the corresponding portions of the requested signal,

18 selecting segments of the composite signal according to
19 logical values of corresponding bits of the transaction-specific
20 identification data; and

21 combining the selected segments to form a watermarked
22 signal which includes the transaction-specific identification data
23 embedded therein.

1 Claim 39 (Original): The computer system of Claim 38 wherein the first
2 and second marked segments are compressed such that watermarked signal formed
3 by combining the selected segments is compressed.
4

5 Claim 40 (Currently amended): A computer-readable storage medium
6 executable on a server computer on which is stored a signal which comprises:

7 one or more segments of a subject signal;

8 for each of the segments,

9 a first segment instance representing a first logical value of portion
10 of a pattern which is embedded in the segment; and

11 a second segment instance representing a second logical value of the
12 portion embedded in the segment.
13

14 Claim 41 (Original): The computer-readable storage medium of Claim 40
15 wherein two or more segments of the subject signal are represented in a composite
16 frame; and

17 further wherein the composite frame includes the following frame
18 instances:

19 (i) the first segment instance of a first of the two or more segments of the
20 composite frame and the first segment instance of a second of the two or more
21 segment of the composite frame;

22 (ii) the first segment instance of the first segment of the composite frame
23 and the second segment instance of the second segment of the composite frame;
24
25

1 (iii) the second segment instance of the first segment of the composite
2 frame and the first segment instance of the second segment of the composite
3 frame; and

4 (iv) the second segment instance of the first segment of the composite frame
5 and the second segment instance of the second segment of the composite frame.
6

7 Claim 42 (Original): The computer-readable storage medium of Claim 41
8 wherein the frame instances (i) through (iv) are compressed.
9

10 Claim 43 (Original): The computer-readable storage medium of Claim 40
11 wherein the first and second segment instances or each of the segments are
12 compressed.
13

14 Claim 44 (Currently amended): A transaction-specific watermark
15 embedded in requested digital content, wherein the digital content is received at a
16 server-side computer.
17

18 Claim 45 (Previously presented): The watermark of claim 44, wherein the
19 watermark is embedded in a carrier wave transporting the requested digital content
20 via a network to a party who requested the digital content.
21

22 Claim 46 (Previously presented): The watermark of claim 44, wherein two
23 or more segments of a signal representing the requested digital content are
24 included in a composite frame; and further wherein the composite frame includes:
25

1 (i) a first segment instance of a first of the two or more segments of the
2 composite frame and a first segment instance of a second of the two or more
3 segment of the composite frame;

4 (ii) the first segment instance of the first segment of the composite frame
5 and a second segment instance of the second segment of the composite frame;

6 (iii) a second segment instance of the first segment of the composite frame
7 and the first segment instance of the second segment of the composite frame; and

8 (iv) the second segment instance of the first segment of the composite frame
9 and the second segment instance of the second segment of the composite frame.
10

11 Claim 47 (Currently amended): A transaction-specific watermark
12 embedded in requested digital content, the watermark being generated by one or
13 more processors of a server computer configured to perform acts of:

14 generating transaction identification data identifying a received request;

15 including a pattern in the requested digital content to form a watermarked
16 signal using a predetermined basis signal, wherein the transaction identification
17 data can be derived from the pattern, wherein including is designed to introduce no
18 more than a predetermined maximum level of perceptibility to the requested digital
19 content.
20

21 Claim 48 (Previously presented): The watermark of claim 47, wherein the
22 watermark is embedded in a carrier wave transporting the requested digital content
23 via a network to a party who requested the requested digital content.
24
25

1 Claim 49 (Previously presented): The watermark of claim 47, wherein two
2 or more segments of a signal representing the requested digital content are
3 included in a composite frame; and further wherein the composite frame includes:

4 (i) a first segment instance of a first of the two or more segments of the
5 composite frame and a first segment instance of a second of the two or more
6 segment of the composite frame;

7 (ii) the first segment instance of the first segment of the composite frame
8 and a second segment instance of the second segment of the composite frame;

9 (iii) a second segment instance of the first segment of the composite frame
10 and the first segment instance of the second segment of the composite frame; and

11 (iv) the second segment instance of the first segment of the composite frame
12 and the second segment instance of the second segment of the composite frame.
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